Maine GeoLibrary

STATE OF MAINE

Geographic Information Library Board

Strategic Plan Update, Enhancement,
and Alignment with the NSGIC Fifty States Initiative

First Draft

Acknowledgements

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The Sewall Team for this project was composed of James W. Sewall Company; Oswald Associates, LLC; Reference Standard; and Somers-St. Claire. Additional assistance from Paul J. Samara is acknowledged as well.

The Sewall Team wishes to thank the Maine GeoLibrary Board, their Project Team, Will Mitchell of Mitchell GeoGraphics, the Maine GIS Users Group (MEGUG) and the Office of Maine GIS (MEGIS) for their assistance and continuous input into the process. Lastly, on behalf of the Maine GeoLibrary Board, the Sewall Team wishes to thank all those who contributed by supplying their valuable input through the open forums, meetings, on-line survey and numerous other ways. Without your participation, this project could never have been successfully completed.

Cover Page

The cover page depicts a Wordle graphic within an outline of the State of Maine. The Wordle graphic was created using http://wordle.net from the full text of this strategic plan. The words displayed in a Wordle graphic are scaled in size based on their frequency of occurrence in the text. This graphic has been modified from the original Wordle graphic for artistic purposes.

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1. EXECUTIVE SUMMARY

Recommendations: Expand participation, obtain a statewide GIS Coordinator, improve statewide GIS coordination, improve access to GIS geospatial data, develop and maintain statewide geospatial data, lower the barriers to the use of GIS, improve communication, improve access to training/education, develop champions, and establish sustainable funding.

1.1 Why Is GIS Important to Maine?


Mount Katahdin and the Penobscot River

Why are geographic information systems important to the State of Maine? That is the first question that each reader of this report should ask. No, it's not because the technology is spectacular! It's because the technology provides users from all walks of life with a tool that can make their lives better or their businesses more cost effective and more efficient. It's also because the world is just starting to understand its strategic value and how much this powerful technology is rapidly becoming deeply imbedded in our everyday lives.

Whether it's the use of a car navigation system providing the latest information on restaurants, places to stay or cultural attractions in a community or the use of Google Earth (or Microsoft's Virtual Earth) to look at an area while sitting in the comfort of your home, this technology is rapidly becoming accessible to a greater and greater number of people in each state each day. If geographic information isn't available in your state, then your state is less able to compete.

Looking for a house? With the fluctuating price of gas, people aren't jumping in their cars to take a look at potential places. They now start out by looking at the house, the neighborhood and the services adjacent to it via geospatial technologies on the Internet.

Looking for a place to locate a business or an industry?
Companies start by searching the Internet for locations that meet their criteria in terms of site, access, labor costs, and labor skill. Making your state accessible to these organizations using GIS improves the likelihood that a new company will consider locating in your state.

Responding to an emergency?
GIS can improve the ability of emergency management agencies to effectively respond in a coordinated manner to disasters. It can:

- Project flood and storm inundation and automatically notify residents of the need to evacuate to safe grounds.

- Quickly show road closures and provide communities with evacuation routes or location of shelters during a crisis.
- Identify patterns of diseases to determine impact.

Improve Public Safety?

GIS can assist in protecting communities by:

- Providing simple, effective crime analysis techniques that help police solve crimes and, more importantly, prevent crimes.
- Helping police departments save money by more cost effectively deploying their valuable resources.

What else can GIS do?

GIS can provide the tools to:

- Help visitors find a place to stay while on vacation or things to do while staying in an area.
- Study the impact of change on your community.
- Protect valuable natural resources from over development.
- Save school districts money by using GIS to optimize bus routes for safe and efficient services for children.
- Streamline government permitting processes as well as save time and costs by reducing the need to send staff into the field to obtain or verify data.
- Attract high-income jobs to the State by building on a heritage that has seen Maine as one of the leading innovators in this field.

1.2 Why A Strategic Plan?

Alan Lakein, the well known author on personal time management, put it succinctly, "Failing to plan is planning to fail." In 2002, the State of Maine was one of the first states to complete a statewide strategic plan for their geographic information systems, providing them direction to move forward in an organized, cost-effective manner. Shortly after completing the plan, the State provided $2.3 million in bond proceeds to implement it. Prudently, combining those funds with grants from federal sources, the Maine GeoLibrary Board was able to create statewide digital orthoimagery (aerial photos that are geographically referenced), develop standards, pull together other GIS geospatial data, deliver grants to municipalities to develop geospatial data meeting standards and, working with the Maine Office of GIS (MEGIS), University of Maine and the Maine GIS Users Group (MEGUG), deliver a system to make this geospatial data to users throughout Maine. Experience tells us that GIS geospatial data developed on a statewide basis such as digital orthoimagery results in geospatial data that is half the unit cost that local government pays for the same geospatial data. Geospatial data that is developed on a statewide basis and meets local needs typifies the mantra of "build it once and reuse it many times." Only through proper planning and statewide coordination efforts can this be achieved. Now, as this technology becomes rapidly imbedded in our daily lives, the GeoLibrary Board has commissioned this project to analyze the significant improvements that it has made for the State of Maine and to determine where it should proceed in order to keep Maine competitive

with other states who recognize GIS as an invaluable part of the infrastructure needed for success in the 21st century.

1.3 How Was the Plan Completed?

The Maine GeoLibrary Board engaged James W. Sewall Company to perform the work on the project. The Board also established a Project Team composed representatives from the Board and federal, state, county and local government and an independent project manager to oversee this project, provide reviews of submissions, respond to questions and provide direction for the project.

The project was initiated with a scoping meeting with the Board, followed by a series of public forums, meetings with various federal agencies, discussions with representatives from academia pursuing major geospatial initiatives, an open, on-line survey, and presentations to the Maine Society of Licensed Surveyors, the Maine Municipal Association, and MEGUG. Some 245 individuals participated in the on-line survey; 130 participated in the forums held in Auburn, Augusta, Bangor and South Portland.

Findings and analyses were presented at bi-weekly Project Team meetings and monthly GeoLibrary Board meetings as they were completed. Issues and gaps were identified and confirmed with the Board and potential solutions reviewed for accuracy and practicality. As material was developed, it was posted to the GeoLibrary web site. As part of this process, a stakeholder list was established along with a statewide List Service to aid in communicating findings. Material was sent to participants in forums, the surveys and those who had registered on-line to receive it. Comments were welcomed and incorporated into the review process. The two draft strategic plans and a final plan were developed, presented to the Board and modified in accordance with their comments. In addition, drafts of the plan were distributed to the stakeholders for comment as well. All comments were incorporated in the documents as deemed appropriate by the Project Team.

In the end, both the Sewall Team and Project Team believe that an unprecedented open and effective process was followed in the development of a realistic plan that will assist the State of Maine in shaping its direction in responding to its geospatial needs.

1.4 What Was Discovered?

In reviewing the existing situation in Maine, it was easily apparent that the GeoLibrary Board had done an outstanding job with limited funds of delivering geospatial data, developing a parcel grant program and pulling together a framework to make GIS geospatial data available across the State. In 2004, the Board established a program to provide statewide digital orthoimagery (which is seen as an essential geospatial data layer for GIS). In addition, the Board, working with MEGIS and the University of Southern Maine, is developing a statewide GIS

portal (GeoPortal) to deliver geospatial data and GIS services across the State. Recognizing the importance of parcel geospatial data, the State implemented standards for its development and initiated a successful grant program, which allowed 74 local governments out of the nearly 500 in the State to develop digital tax parcel geospatial data that met that standard and was available to be used by others across the State.

The study also found that there was significant room for improvement in statewide GIS coordination and outreach. It also became clear that there was a need for new and updated geospatial data as well as better access to existing State and local geospatial data. Furthermore, the study found that there was a significant need for better communication on such topics as geospatial data development, training opportunities and the availability of grants. Lastly, the study determined that the Board was in dire need of sustainable funding sources to deliver geospatial data and other essential initiatives to the Maine geospatial community.

1.5 What Is Recommended?

- Expand participation
  Expand participation on Board initiatives by establishing a series of work groups composed of leaders, experts, and those impacted by the initiatives representing both diverse sectors and geographies across the State.
- Hire a statewide GIS Coordinator
  Hire a statewide GIS Coordinator to implement the Board's initiatives, serve as the Board's spokesperson across the State, and facilitate cost savings through the sharing of geospatial data, applications, training, and innovative ideas.
- Improve statewide GIS coordination
  Establish an outreach program to promote the use of GIS to meet both public and private business needs to prospective users and potential supporters across the State. Encourage the sharing of geospatial data, applications, innovative ideas, and training. Encourage the use of the GeoPortal, of posting geospatial data, and providing on-line access to it as well.
- Improve access to geospatial data
  Working with the CIO, county and municipal governments, academia and others, implement policies to facilitate the sharing of geospatial data by: inventorying it on an annual basis; providing notification of future geospatial projects and updates to existing geospatial; notifying others of updates; and initiating a major campaign to provide access to the most current geospatial from across the State through the portal.
- Develop and maintain statewide geospatial data
  Establish a program to provide continual updates of digital orthoimagery across the State. Following the recommendations in the Board's study to establish an integrated land records information system, establish a program to develop and maintain parcel geospatial data meeting statewide standards. Work with the Department of Transportation and the Public Utilities Commission to bring together two statewide roads geospatial datasets into one integrated roads and addressing geospatial dataset. Develop high-resolution elevation geospatial data for the State. Establish various geospatial standards as required to assure geospatial usability. Hire a staff person to assist in the implementation of the integrated land records information system and to gather geospatial from across the State for the GeoPortal.

- Lower the barriers to the use of GIS
  Lower the barriers for the use GIS by local government and others by developing easy-to-use applications that are shared via the GeoPortal to meet the business needs of local government. Promote the use of the GeoPortal as a means to eliminate the cost of geospatial data storage and other infrastructure for local government.
- Improve communication
  Improve communication by the Board by expanding the services provided on their website (e.g., developing a calendar of events, adding information on impending projects) and judiciously keeping it up-to-date; growing the registration on the Board's new List Serve; regularly posting geospatial news from around the State; and developing an on-going program to speak about GIS and the Board's initiatives on a regular basis across the State.
- Improve access to training/education
  Work with educators from across the State to develop a new area on the website to post training opportunities and curricula from across the State.
- Develop champions
  Implement a communications plan. Establish a focus group of key individuals identified during the study to provide advice on potential champions. Identify key individuals from various sectors who can benefit from the use of geospatial technologies to attain their goals. Work with those individuals to demonstrate how geospatial technology can meet their needs. Provide them and key State officials with strong business cases to enlist their aid in supporting the GeoLibrary Board initiatives.
- Establish sustainable funding
  Work with the CIO, champions, the Governor's office and legislators to establish appropriate funding mechanisms to support both operating and capital expenses. Establish long-term budgets with consistent funding needs for long-term Board initiatives. Document successes in measurable terms and develop a key message on the Board and the need for its initiatives.

1.6 Background

The State of Maine is known nationally as one of the first adopters and most longstanding implementers of GIS in the country. It is also one of the first states to develop a statewide E-911 system. Since the 1980's Maine has sustained the foresight and its pool of technical and analytical talent to deliver consistent services in spite of chronically scarce resources.

In 2002, a strategic plan was created which resulted in the formulation of the Maine Library of Geographic Information (GeoLibrary) to advance GIS for the State of Maine. Oversight of the GeoLibrary is performed by an appointed Board of volunteers from several public and private sectors across the State. The Board and the GeoLibrary data holdings are supported by MEGIS through an agreement with the Maine State Government. In that same legislative session, a $2.3 million environmental bond issue was created that has served as the prime funding mechanism for the GeoLibrary Board's (Board) programs since then. The Board is supported by the MEGIS, which provides core GIS services on behalf of the Board and state agencies (through their GIS Stakeholders Group).

In 2003 and 2004, the GeoLibrary Board expanded on the work of the Strategic Plan by developing State digital parcel standards and awarding grants to municipalities to bring their

parcels into alignment with the newly developed standard. It also initiated a project to update digital orthoimagery across the state.

In 2006, the Board applied for a grant through the Federal Geographic Geospatial data Committee's (FGDC) Category 3: Fifty State's Initiative program to update its 2002 Strategic Plan and recommend a conceptual framework and functional specification for an Integrated Land Records Information System (ILRIS) for the State of Maine. In 2007, a $50,000 grant was awarded to the State. Later that year, an RFP was issued to perform the work and in 2008 a contract was awarded to the Sewall Team. This document is the result of the study performed under that contract.

2. STRATEGIC PLANNING METHODOLOGY AND INITIAL FINDINGS

Key areas of need identified by participants in the forums:

- Coordination and sharing.
- Geospatial data development, maintenance and access.
- Communication.
- Training and assistance.
- GIS software and support.

This section provides an overview of the strategic planning methodology used on this project. Details on the forums and meetings held and the on-line survey and the analysis performed are provided in the Appendices.

2.1 Funding

This project was funded through a FGDC Category 3 grant. It was supplemented by funding from the GeoLibrary Board as well as in-kind services from the MEGIS.

2.2 Oversight

The project was overseen by the GeoLibrary Board. Specific guidance and logistic support was provided through the use of an independent project manager (Will Mitchell) hired by the Board for the project and the Board's Project Team, which was composed of members of the Board, MEGIS, the USGS and county and municipal representatives. All were invaluable to the success of the project. They are listed in Appendix R.

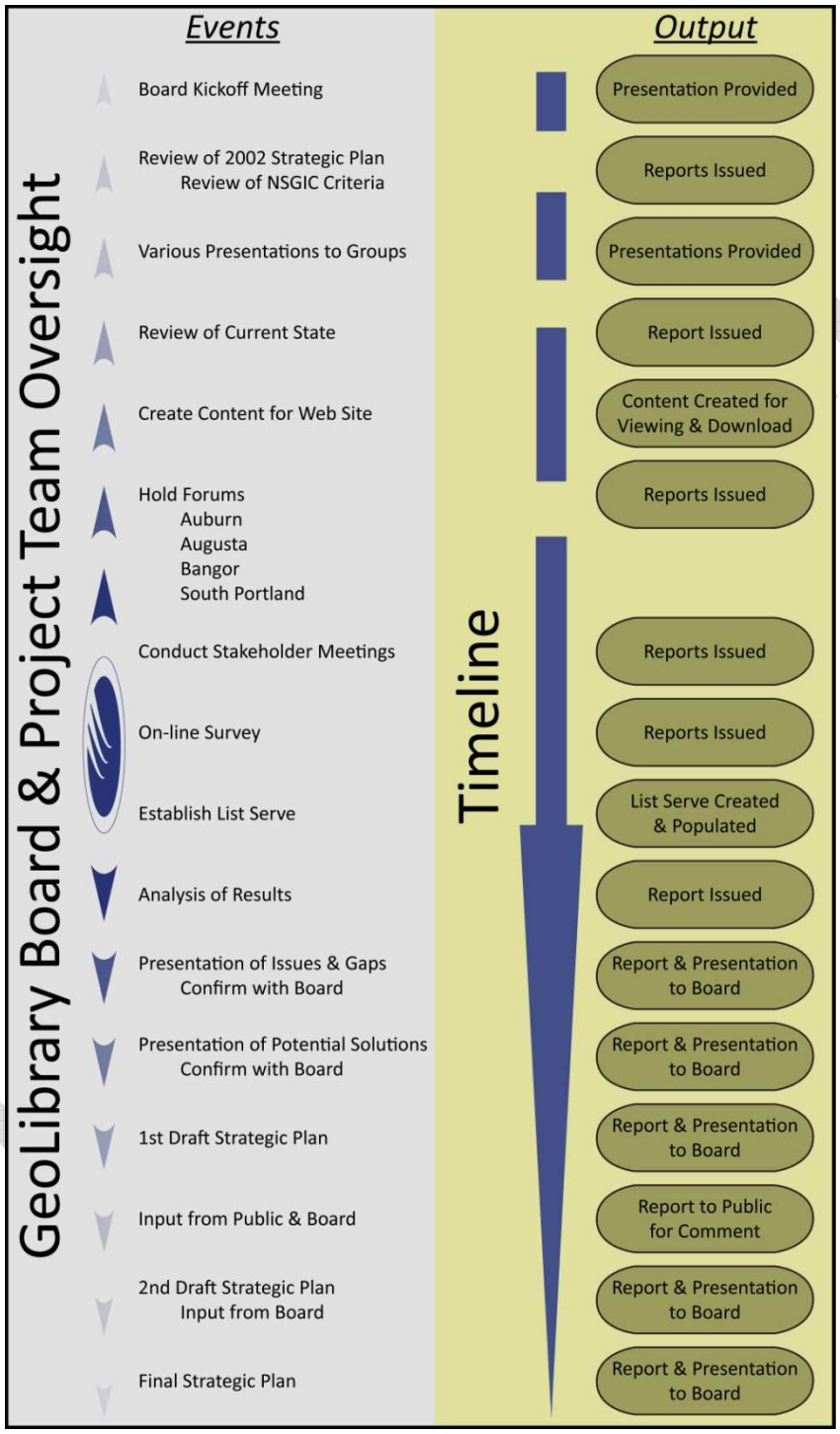
2.3 Process

- Project Kickoff Meeting – A project kickoff meeting with the GeoLibrary Board was held on February 20, 2008, to discuss the Sewall Team approach to the project, key items which the Board felt needed particular attention, project goals and objectives, and the Board's anticipated outcome. In addition, the Board was asked to complete a document entitled, "Opening Questions." A copy of that document is provided in Appendix P.

- Review of the 2002 Strategic Plan – A review of the 2002 Strategic Plan was conducted by the Sewall Team. As part of that review, the Sewall Team interviewed staff members of MEGIS and the members of the State's Project Team to determine the status of the various initiatives and activities put forth in that plan. That information was captured in a chart entitled "Maine 2002 Strategic Plan Five Pillar Update," which is located in Appendix A.

- Review of the existing state of the GIS Coordination Program in Maine – The existing state of the GIS Coordination Program in Maine was determined through

Maine's Strategic Planning Process



a number of methods. Initially, Board members were asked to complete the 2008 Maine Maturity Assessment (refer to Appendix Q) to provide the Sewall Team with a perspective on their understanding of the NSGIC criteria and the current situation. The wide range in responses and the types of questions that the Board members had over the survey indicated that there was a need for a greater understanding of these criteria by the Board. (Subsequent to that, the Sewall Team had made a presentation to the Board to review the National States Geographic Information Council's (NSGIC) coordinating criteria--see below.) However, direct conversations with Board members and, in particular, members of the Maine Project Team provided invaluable in determining the success of the program from the Board's perspective. Next, input on the coordination program was received from the Maine geospatial community at large during the public forums and the on-line survey. Finally, meetings held with key stakeholders provided knowledgeable perspectives on the existing state of the program. That information is summarized in a SWOT analysis provided in Appendix K as well as the reports on the on-line survey, public forums and meetings in Appendices L-M respectively. This information was then used as part of the process of evaluating the issues and potential solutions identified in Appendix D.

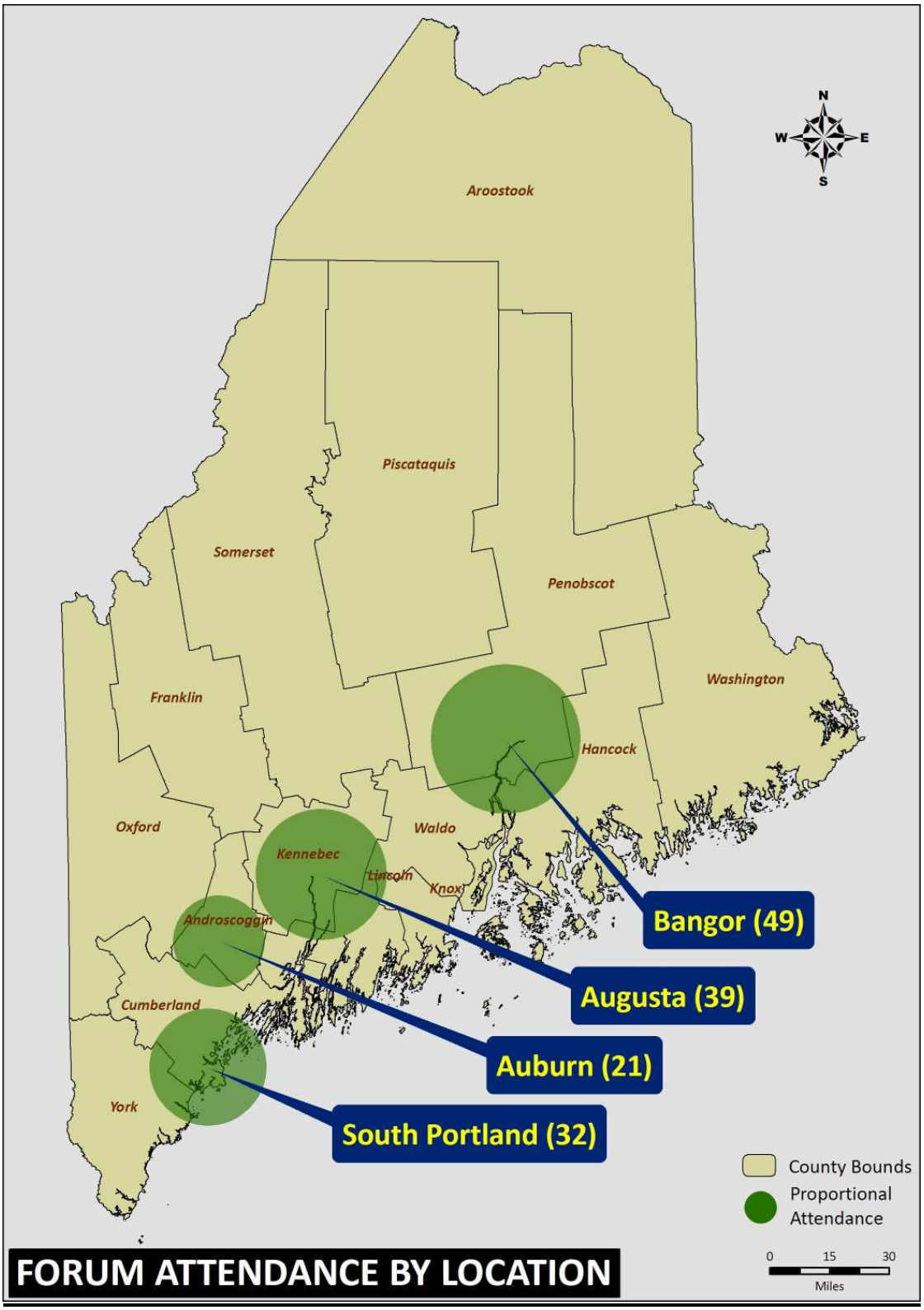
- Review of the National States Geographic Information Council's Coordinating Criteria – A review of the NSGIC coordinating criteria was conducted with the Board. (The Board had asked to have the strategic plan aligned with those criteria. These criteria were present in successful state GIS coordination programs.) (Refer to Appendix O)

- Presentations/Interactive Sessions – Additional presentations and facilitated sessions were held throughout the project. These included sessions at the Maine Municipal Association's Technology Conference, the Maine Society of Licensed Surveyors Annual Conference and the Maine GIS User's Group Fall Conference.

- GeoLibrary List Serve – Early in the project, it became apparent that communication within the Maine geospatial community was a challenge. The Board promptly took action to have a GeoLibrary List Serve established. Individuals can join on-line at: http://lists.maine.edu/cgi/wa?A0=geolibrary-l.

- Stakeholder Forums
    - 3 Regional Stakeholder Forums were held at:
        - Lewiston/Auburn – April 29, 2008
        - Bangor – May 6, 2008
        - South Portland – May 7, 2008
    - A State Agency Stakeholder Forum was held in Augusta on April 30, 2008.
    - Attendee breakdown – Overall, approximately 130 individuals attended the stakeholder forums.

The map below depicts the location and attendance at each Forum.



Summarized below are the key areas of need that were identified during the forums:

- Coordination and sharing.
  - Better data sharing between state agencies.
  - Better data sharing and consistency between municipalities and the LURC townships.
  - Active efforts to collaborate between municipalities and counties around land records standardization.
  - Fuller utilization of growing capabilities within the educational sector for data development and distribution.
  - Standards development for additional layers – easements especially – to allow these to be collected and shared.
- Geospatial data development, maintenance and access.
  - Better and more transparent access to data.
  - More frequent and automatic notification of changes and updates.
  - Easier services for generating and understanding metadata.
  - Expansion of the parcel grants program.
  - More frequent and accurate aerial imagery.
- Communication.
  - Better utilization of online resources to ask questions of the Maine GIS users community and get specific answers.
  - More awareness of GeoLibrary activities.
  - Fuller awareness of grant opportunities and grants that have been awarded.
  - More complete ongoing awareness of regionalized land records data initiatives.
- Training and assistance.
  - Accessible services and/or staff dedicated to exposing data and services to novice users.
  - Specific training for underexposed stakeholders: deeds registries, legislators.
  - Dedicated regional service centers providing walk in services.
  - More educational programs for communities.
  - Development of more targeted and easy-to-use web applications.
- GIS software and support.
  - Closer examination of enterprise/bulk licensing of commercial software to maximize access to functionality by greatest number of users.
  - Better use of web-based mapping software and services (Google Earth, Maps, Microsoft Virtual Earth/Live Local) to distribute and access complex GIS data.

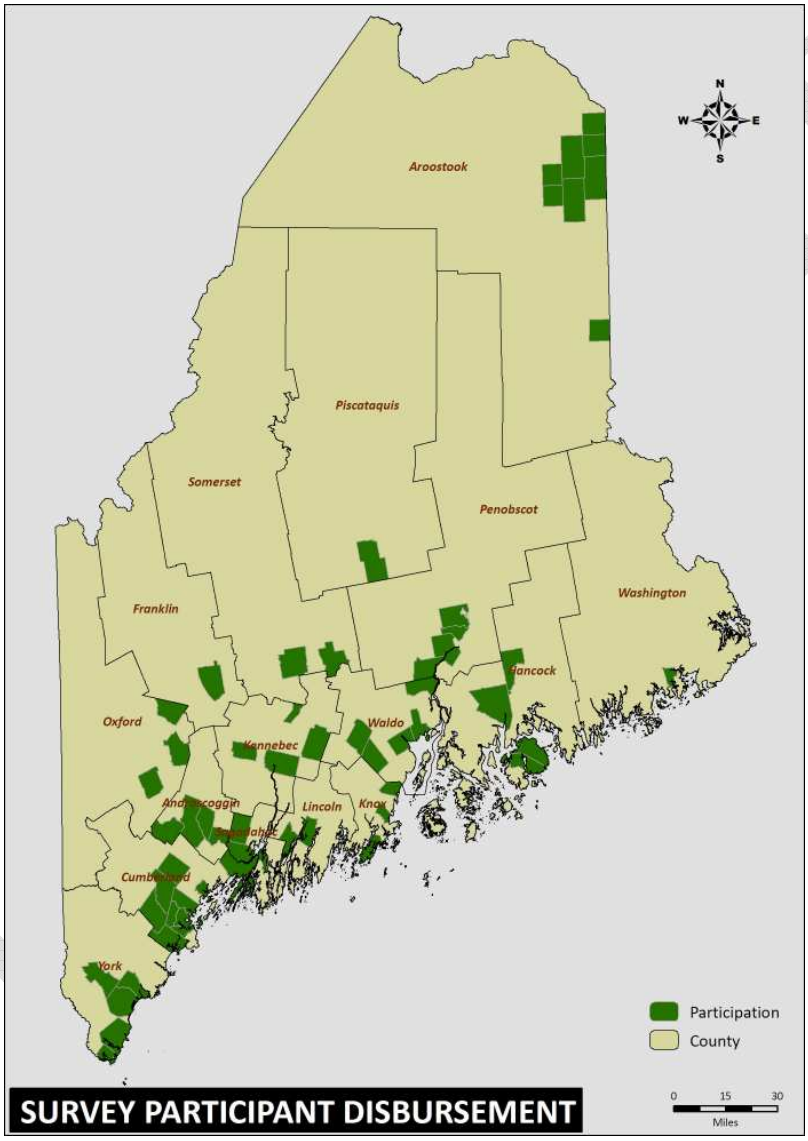
Reports on each of the forums as well as an overall summary report are included in Appendix M.

- On-line Survey – An on-line survey was conducted between April 23, 2008, and June 4, 2008. Its purpose was to solicit input on strategic planning for statewide GIS coordination and lands records issues from a wide variety of responders across Maine, some of whom may not have had the opportunity to attend the forums that were held.

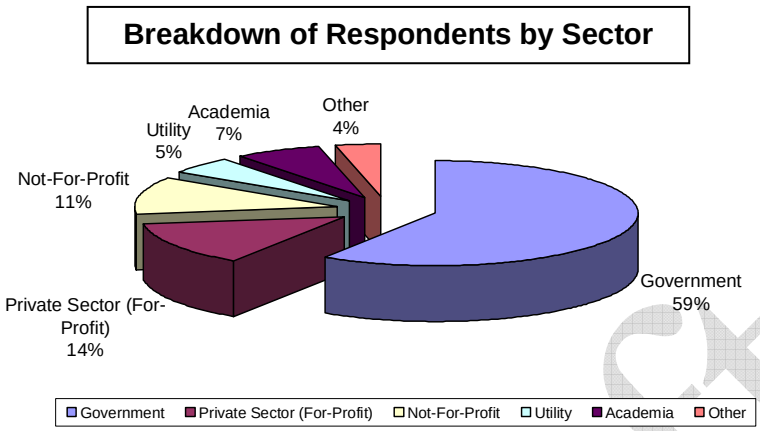
  The survey was originally scheduled to be open for 3 weeks, but the timeframe was increased to accommodate input from attendees at the forums and other meetings that

were held on the project throughout May. Some 245 individuals completed all or part of the survey; 188 completed the entire survey, comprising a reasonable number of participants for a survey of this type. A detailed report on the survey is included in Appendix L.

The map that follows approximates geographic disbursement of the participants in the survey.



The survey attracted a wide variety of respondents with approximately 60% being from government and the remainder being from the private sector, not-for-profits, academia, and utilities. In addition, there was a good diversity between technical and non-technical users as well. Below is a breakdown of those participants by sector.



Respondents indicated that major actions that could be taken to improve GIS coordination in Maine were:

- Providing updated imagery;
- Improving the accessibility of geospatial as well as providing web mapping services for both State and local geospatial;
- Delivering an integrated land records information system;
- Improving statewide communication;
- Providing shared GIS services or regional GIS service centers; and
- Providing better GIS educational/training opportunities.

Geographic information systems (GIS) were noted as having a wide variety of important uses in Maine. Key among these were environmental and land conservation; real estate and development; and tax assessment, emergency management, transportation and public safety.

When asked what source was the most appropriate for long-term sustainable funding of statewide GIS activities, 18% indicated that it should come from general state funding designated by the legislature, 17% believed that it should come from cost sharing between state and municipal governments; and 15% believed it should come from a real estate transfer tax. However, a number of those responding encouraged a combination of funding sources be used rather than one single source.

A number of suggestions were made for potential political or executive champions for statewide GIS coordination, from current, former and future governors to legislators, the state CIO, the MEGIS Director and individuals in the private sector, not-for-profits and government.

Time and time again, the respondents clarified the importance of having good parcel geospatial data and an integrated land records system. On the one hand, parcel geospatial data was seen as fundamental for the private industry for development and the real estate industry. On the other, it was seen as critical for the public sector for

open space planning wildlife conservation and tax assessment. It was also specifically noted as being critical to emergency management, regulation, and asset management.

The Sewall Team recommends that the Board pursue obtaining a combination of multiple champions from varied sectors as the best approach to assure its long term survival.

The benefits of an integrated lands records information system were seen as saving time, costs and resources for both those assessing the geospatial data as well as those supplying the geospatial data. Other benefits specifically listed included improving the transparency of government, reducing gas use and carbon emissions by saving trips to government offices and improving the overall quality of the geospatial infrastructure for Maine.

- Stakeholder meetings – Stakeholder meetings were held to insure that input from key sectors or leaders was considered.
    - Maine Chief Information Officer - The first stakeholder meeting was held with Dick Thompson, CIO for the State of Maine. Dick was clear in his support for the GeoLibrary Board and noted that the State was providing both hosting services and staff resources to support the Board's mission. However, he also noted that his agency's prime focus was on support to state agencies. In addition, he expressed a longer-term need for the Board to be able to provide funding to support its operational and logistical needs.

    - MEGIS – A meeting was held with Mike Smith, Director of MEGIS, to discuss his office's perspective on statewide GIS coordination as well as other items facing the Board. As Director of MEGIS, Mike Smith has significant involvement in Board activities and projects. In addition, he provided continual feedback on this strategic plan. In discussing, statewide GIS coordination, Mike echoed the CIO's position that his office's prime focus was to support the state agencies. He noted that it would continue to support the Board with both technology and staff resources, but, because it was a "fee-for-service" agency, it would very much like to see the Board be funded adequately to pay for the support it received. He also made it clear that his office's focus did not include statewide GIS coordination.

    - Federal Agencies - As the project progressed, it was clear that a number of federal agencies were extremely active in Maine and could provide insight on projects they had under way or were planning and the potential for synergistic activities benefitting the State of Maine. These meetings also provided them with the opportunity to indicate any special needs that they might have to perform those projects. Although scheduling was difficult, several of these agency representatives, namely the National Geospatial-Intelligence Agency

(NGA), Department of Homeland Security (DHS), US Fish & Wildlife (USFW), Penobscot Nation, US Department of Agriculture (USDA), Environmental Protection Agency (EPA), National Park Service (NPS), Army Corps of Engineers (ACE), Wells National Estuarine Reserve, and National Oceanic and Atmospheric Administration (NOAA), were brought together on June 26, 2008. This meeting was followed up by meetings with additional representatives of NOAA on July 21, 2008, and July 22, 2008 with the National Forest Service. (Please refer to Appendix N for additional information on the meetings)

A considerable amount of valuable information was gained from these sessions. Chief among them was the fact that the National Agricultural Imagery Program was being modified. Imagery was now scheduled for collection every other year.

It was noted that 55% of the State of Maine was currently covered under the program, and, if other federal agencies contributed to the program, the State had the option of getting the remainder of the State flown with 4 band, 1 meter, leaf-on imagery for $125,000.

In addition, the need for better elevation data was a need consistently articulated by the federal agencies.

- Education – The Sewall Team was fortunate to be able to attend presentations by Tora Johnson of the University of Maine at Machias on the study that she was involved in to determine education needs for the geospatial workforce in Maine and the development of a virtual geospatial technology department drawing resources from 3 universities and 3 community colleges in Maine. In addition, on August 13, 2008, a call was held with Matthew Bampton of the University of Southern Maine to discuss projects that he was involved in and synergistic opportunities that the educational community and the Board might undertake. Key among the topics discussed was the need identified at the forums for those in the geospatial community to be able to easily find out about both training courses and longer-term educational opportunities available in Maine.

- Stakeholder list – A stakeholder list was established by combining the MEGUG list of members as well as multiple other sources. In addition, individuals were afforded the opportunity to sign up on-line through the GeoLibrary Board web site (http://www.state.me.us/geolib/index.htm). Currently, there are over 400 included on this list. Reports and analytical documents were made available to stakeholders throughout the process to keep them informed and to elicit comments as required.

- Web Site – In an effort to improve awareness of the Board's activities, MEGIS obtained the ability to directly administer the GeoLibrary web site. A section was created specifically for this project, which provided relevant project material and access to the project blog: http://www.state.me.us/geolib/projects/fiftystates/index.htm.

2.4 Issues and Gaps

Subsequent to the review of the 2002 Strategic Plan, a chart was prepared analyzing the current status of the initiatives (Five Pillars) included in it (see Appendix A). Similarly, a chart showing the needs that the geospatial community conveyed through the forums, meetings and on-line survey was developed as well. Next, the 2007 Maine GeoLibrary Priorities and Initiatives (refer to Appendix C) were reviewed with the Project Team to determine their current relevance and priority.

2.5 Solutions

All of these were then combined into a chart listing issues/gaps/initiatives. This includes each one's source, potential solutions, priorities, costs, timeframes and work areas (see "Overall Maine GeoSpatial Listing of Issues and Action Items Maine" in Appendix D). Each item was closely considered in light of the Board's three main focus areas for this study: coordination with local governments, academics and others; development of sustainable funding sources; and cultivation of political champions to grow future geospatial initiatives. Once again, these were reviewed with the Board and modified in accordance with their comments.

A methodology was then proposed for implementing those solutions and presented to the Board. After receiving comments from the Board and the Project Team, this methodology then became the basis for the Implementation Plan provided in Section 6 and Appendix G. In addition to the Implementation Plan, details on how to develop and run the recommended work groups successfully have been provided in Appendix F. A plan to improve communication for the Board has been included in Appendix E while details on developing long-term champions have been developed in Appendix I. Finally, a discussion on an approach to achieving sustainable funding has been included in Section 6.5 and Appendix J.

2.6 Project Management

The Sewall Team and the Board implemented a number of project management strategies. Key among them were the development of a Project Team and the hiring of a project manager by the Board to manage the project, provide regular feedback and direction to the Sewall Team and conduct a number of the reviews for the Board. Below are a few of the project management methods taken by the Board and the Sewall Team for this project:

- Board Meetings – The Sewall Team attended GeoLibrary Board meetings (either in person or by conference call) on a monthly basis to gain Board insight and input on the project and provide status update reports to the Board.
- Project Team Meetings – The Sewall Team and the Board's Project Team met (either in person or by conference call) on a bi-weekly basis to keep the project moving forward and to respond to questions and issues as they arose.
- Project Reports/Schedules/Deliverables – In addition to the biweekly meetings held with the Project Team and the monthly meetings held with the Board, the Sewall Team provided the Board with monthly status reports and schedules.

3. GEOLIBRARY MISSION, VISION, AND STRATEGIC FOCUS

The Maine GeoLibrary Board has clearly defined its mission and vision as well as a strategic focus statement. Collectively, the Board's mission, vision and strategic focus statements provide a strong foundation for their strategic plan.

The Maine Library of Geographic Information became a reality on April 9, 2002 when the Governor signed into law L.D. 2116 "An Act to Establish the Maine Library of Geographic Information (Chapter 649))." This law officially sanctions the Library as the vehicle by which geospatial data custodians or their designees organize, catalog, and provide access to public geographic information to all levels of government and to the public. The Maine GeoLibrary Board consists of appointed volunteers that are responsible for administration of the Library and ensuring statewide GIS coordination.

The Maine GeoLibrary Board has clearly defined its mission and vision as well as a strategic focus statement. All of these were recently reviewed and updated by the Board just prior to the start of this strategic planning project and are listed below.

3.1 The Maine GeoLibrary's Mission Statement

The mission of the GeoLibrary is to create an electronic gateway to public geographic information, and to expand and promote the value of geospatial data through widespread distribution and innovative use for the benefit of Maine's citizens.

3.2 The Maine GeoLibrary's Vision Statement

The GeoLibrary's vision is to provide state-of-the-art, comprehensive, and ever expanding access to public geospatial information and services, and to facilitate the availability of geographic information collections and access for all citizens. This vision encompasses:

- the development and subsequent maintenance of an Internet-based GeoLibrary portal. This portal will enable discovery of and access to geospatial data held by public and private sources. It utilizes nationally recognized standards and techniques that permit these geospatial to be combined and aggregated easily for many uses;
- the stewardship of priority statewide geospatial datasets and the associated technology essential for sharing geospatial data ensuring that State geospatial data is available, up to date and accurate;
- the design and implementation of appropriate geospatial data standards to allow it to be used for multiple purposes facilitating the modernization and consistent GIS development of local government land records to make them more accessible and usable by businesses and citizens of Maine;
- support for smart growth and growth management with geospatial datasets and techniques that enable state/county/municipal governments to effectively plan land use, location decisions, and site designs in a way that will minimize negative impacts on the social, economic, and environmental health of Maine;

- multi-organizational geospatial data-sharing that results in significant savings in the cost of creating and maintaining geospatial data;
- budgeting that prioritizes the strategic importance of geospatial information, its maintenance and dissemination;
- promoting innovative uses of public geospatial information that fosters economic development; and implementing education and outreach programs that advocate for the further development of Maine as a national center for GIS research, education, and industrial growth.

3.3 The Maine GeoLibrary's Strategic Focus

The Board has identified four areas of Strategic Focus (SF) to realize its mission and vision:

- the development and implementation of statewide geospatial data standards to ensure geospatial data quality and to enable common use;
- the development of a web-based distribution system to facilitate access to statewide geospatial data holdings;
- the provision of funding and management for high priority geospatial data and geospatial database development to support community and regional planning, smart growth and community preservation; and
- the provision of coordination, outreach and education in support of better public use of geospatial data and to maintain and enhance Maine's position as a national center for GIS research, education and industrial growth.

3.4 The GeoLibrary Board's Desire to Align with the NSGIC Coordinating Criteria

The National States Geographic Information Coordination Council undertook a study to determine what made statewide GIS coordination programs successful. Appendix O includes the characteristics that the NSGIC found were present in these successful State GIS coordinating programs across the country. One of the goals expressed by the GeoLibrary Board was to better align Maine's GIS coordination program (and this strategic plan update) with these criteria to improve their opportunity for long term success.

3.5 Conclusion

Collectively, the Board's mission, vision and strategic focus statements provide a strong foundation. These were key factors used in developing an updated strategic plan which is aligned closely with the NSGIC Coordinating Criteria. Each was taken into consideration by the Sewall Team in recommending practical solutions to be implemented as part of this strategic plan.